September 2006 Semi-Annual Groundwater and WDR Abbreviated Sampling Plan
Former C-6 Facility, Los Angeles, California
Boeing Realty Corporation,
August 27, 2006

Table 1 presents the details of the September 2006 semi-annual and quarterly WDR groundwater monitoring program as required by the general Waste Discharge Requirements Order No. R4-2002-0030: Series 007. Monitoring wells will be gauged prior to collecting groundwater samples to determine static water levels and total well depth. For the WDR wells (total of 16 groundwater and bioremediation monitoring wells), low-flow purging to maintain uniform flow rates on the order of 0.1 to 0.5 liters/min will be used to collect groundwater samples and minimize disturbance to the groundwater in the well such that drawdown is less than 0.3 foot. Samples collected from each well will be tested for biogeochemical parameters using a YSI unit, field test kits, and fixed-base laboratory analyses. The YSI unit, with flow through cell, will be used to measure pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), Electrical Conductivity (EC), and temperature. Hach, Inc. field test kits will be used to measure ferrous iron (Fe [II]) and hydrogen sulfide for the WDR wells as shown on Table 1. Following field test kit analyses, all groundwater samples will be collected for analysis of volatile organic compounds (VOCs) by EPA Method 8260B. Samples from the WDR wells will also be analyzed for total sulfides by EPA Method 376.1 or approved equal. For wells which are designated for WDR and quarterly or semi-annual monitoring, the low-flow procedures will be followed as described above. All other procedures, including quality assurance (QA) and data validation, will be as described in the 2006 Groundwater Monitoring Work Plan (CDM, January 31, 2006).

Table 1

September 2006 Semi-Annual Groundwater and Quarterly WDR Monitoring
Former C-6 Facility
Los Angeles, California

Well ID	Water Bearing Unit	Sampling Order (September 2006)[1]	Semi-Annual Groundwater and Quarterly WDR Event Analytical Program September 2006				
			Water Level Gauging	VOCs (8260B)	Field Parameters [2]	Hydrogen Sulfide (Field Measurement)	Total Sulfides
Groundwater Monitoring Wells - Semi-Annual							
WCC_3S	B-Sand		x				
WCC_4S	B-Sand		x				
WCC_5S	B-Sand	13	x	x	x		
WCC_6S	B-Sand		x				
WCC_7S	B-Sand		x				
WCC_9S	B-Sand	4	x	x	x		
WCC_12S	B-Sand		x				
DAC-P1	B-Sand		x				
TMW_04	B-Sand		x				
TMW_06	B-Sand		x				
TMW_07	B-Sand		x				
TMW_08	B-Sand		x				
TMW_10	B-Sand	14	x	x	x		
TMW_11	B-Sand	2	x	x	x		
TMW_14	B-Sand	12	x	x	x		
TMW_15	B-Sand	16	x	x	x		
BL-03	B-Sand		x				
MW0005	B-Sand		x				
MWB012	B-Sand		x				
MWB013	B-Sand	11	x	x	x		
MWB014	B-Sand		x				
MWB019	B-Sand	5	x	x	x		
XMW-09	B-Sand	19	x	x	x		
XMW-19	B-Sand	10	x	x	x		
MWC015	C-Sand		x				
MWC016	C-Sand		x				
MWC017	C-Sand	7	x	x	x		
MWC021	C-Sand	15	x	x	x		
Groundwater Monitoring Wells - Semi-Annual and WDR							
CMW001	C-Sand	1	x	x	x	x	x
CMW002	C-Sand	23	x	x	x	x	x
Groundwater Monitoring Wells - WDR							
CMW026	C-Sand	20	x	x	x	x	x
Bioremediation Monitoring Wells - WDR							
IRZB0081	B-Sand	31	x	x	x	x	x
IRZB0095	B-Sand	29	x	x	x	x	x
IRZMW001A	B-Sand	39	x	x	x	x	x
IRZMW001B	B-Sand	28	x	x	x	x	x
IRZMW002A	B-Sand	37	x	x	x	x	x
IRZMW002B	B-Sand	22	x	x	x	x	x
IRZMW003A	B-Sand	38	x	x	x	x	x
IRZMW003B	B-Sand	25	x	x	x	x	x
IRZMW004	B-Sand	33	x	x	x	x	x
IRZMW005	B-Sand	32	x	x	x	x	x
IRZCMW001	C-Sand	30	x	x	x	x	x
IRZCMW002	C-Sand	27	x	x	x	x	x
IRZCMW003	C-Sand	35	x	x	x	x	x

Table 1

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Well ID	Water Bearing Unit	Sampling Order (September 2006)[1]	Semi-Annual Groundwater and Quarterly WDR Event Analytical Program September 2006				
			Water Level Gauging	VOCs (8260B)	Field Parameters [2]	Hydrogen Sulfide (Field Measurement)	Total Sulfides
Groundwater Monitoring Wells installed in 2005 - Semi-Annual							
MWB007	B-Sand	26	x	x	x		
MWB020	B-Sand		x				
MWC004	C-Sand		x				
MWC007	C-Sand	9	x	x	x		
MWC009	C-Sand	8	x	x	x		
MWC022	C-Sand		x				
MWC023	C-Sand		x				
MWG001	Gage	3	x	x	x		
MWG002	Gage	6	x	x	x		
MWG003	Gage		x				
MWG004	Gage		x				
Groundwater Monitoring Wells installed in 2005[3] - Quarterly							
MWB003	B-Sand	34	x	x	x		
MWB006	B-Sand	36	x	x	x		
MWB027	B-Sand	24	x	x	x		
MWB028	B-Sand	18	x	x	x		
MWC006	C-Sand	17	x	x	x		
MWC011	C-Sand	21	x	x	x		
Quality Control Samples							
Duplicates (1 per 20 wells)				x (est. 2)			
Rinsate Blanks (1 per day)				x (est. 5)			
Field Blanks (1 per day)				x (est. 5)			
Decon Water (1 per day)				x (est. 5)			
Trip Blanks (1 per day)				x (est. 5)			

Notes:

est. = Quality control sample number estimated based on estimated number of sampling days.

VOCs = Volatile organic compounds by EPA Method 8260B

[1] Sampling order for September 2006 is based on the results of the March 2006 annual and June 2006 quarterly events

[2] Field Parameters = pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), electrical conductivity (EC), temperature, and ferrous iron

[3] This is the last quarterly sampling event for groundwater monitoring wells installed and first sampled in December 2005